	Type	L #	Hits	Search Text	DBs
1	BRS	L1	304613	centrifug$8	US-PGPUB; USPAT
2	BRS	L2	13827	1 and tube with (aspirat$8 or dispens$8 or sens$8 or detect$)	US-PGPUB; USPAT
3	BRS	L3	30535	1 and tube same (aspirat$8 or dispens$8 or sens$8 or detect$)	US-PGPUB; USPAT
4	BRS	L4	132	1 and tube same (aspirat$8 or dispens$8 or sens$8 or detect$) same cluster	US-PGPUB; USPAT

	Type	L #	Hits	Search Text	DBs
1	BRS	L1	304613	centrifug$8	US-PGPUB; USPAT
2	BRS	L2	13827	1 and tube with (aspirat$8 or dispens$8 or sens$8 or detect$)	US-PGPUB; USPAT
3	BRS	L3	30535	1 and tube same (aspirat$8 or dispens$8 or sens$8 or detect$)	US-PGPUB; USPAT
4	BRS	L4	132	1 and tube same (aspirat$8 or dispens$8 or sens$8 or detect$) same cluster	US-PGPUB; USPAT
5	BRS	L5	16	4 and robot$8	US-PGPUB; USPAT

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NEWS 11	FEB 22	Updates in EPFULL; IPC 8 enhancements added
NEWS 12	FEB 27	New STN AnaVist pricing effective March 1, 2006
NEWS 13	FEB 28	MEDLINE/LMEDLINE reload improves functionality
NEWS 14	FEB 28	TOXCENTER reloaded with enhancements
NEWS 15	FEB 28	REGISTRY/ZREGISTRY enhanced with more experimental spectral property data
NEWS 16	MAR 01	INSPEC reloaded and enhanced
NEWS 17	MAR 03	Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 18	MAR 08	X.25 communication option no longer available after June 2006
NEWS 19	MAR 22	EMBASE is now updated on a daily basis
NEWS 20	APR 03	New IPC 8 fields and IPC thesaurus added to PATDPAFULL
NEWS 21	APR 03	Bibliographic data updates resume; new IPC 8 fields and IPC thesaurus added in PCTFULL
NEWS 22	APR 04	STN AnaVist $500 visualization usage credit offered
NEWS 23	APR 12	LINSPEC, learning database for INSPEC, reloaded and enhanced
NEWS 24	APR 12	Improved structure highlighting in FQHIT and QHIT display in MARPAT
NEWS 25	APR 12	Derwent World Patents Index to be reloaded and enhanced during second quarter; strategies may be affected

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
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V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
http://download.cas.org/express/v8.0-Discover/

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FULL ESTIMATED COST	0.21	0.21

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=> s centrifug?
L1 191861 CENTRIFUG?

=> s automat? (p) centrifug?
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'AUTOMAT? (P) CENTRIFUG'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'AUTOMAT? (P) CENTRIFUG'
L2 2595 AUTOMAT? (P) CENTRIFUG?

=> s l2 and robot?
L3 102 L2 AND ROBOT?

=> s l1 and robot?
L4 411 L1 AND ROBOT?

=> s l4 and fraction (s) collect?
L5 0 L4 AND FRACTION (S) COLLECT?

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=> s l4 and (dispen? or aspirat? or plate)
L6          38 L4 AND (DISPEN? OR ASPIRAT? OR PLATE)

=> s l4 and (dispen? or aspirat? or sonicat?)
L7          14 L4 AND (DISPEN? OR ASPIRAT? OR SONICAT?)

=> s l4 and tube (s) cluster (p) robot?
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'CLUSTER (P) ROBOT?'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'CLUSTER (P) ROBOT?'
L8           0 L4 AND TUBE (S) CLUSTER (P) ROBOT?

=> display l6 1-38 ibib abs

L6   ANSWER 1 OF 38  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2006:314624  CAPLUS
TITLE:                   High-throughput isolation of ultra-pure plasmid DNA by
                         a robotic system
AUTHOR(S):               Kachel, Volker; Sindelar, Georg; Grimm, Stefan
CORPORATE SOURCE:        Max-Planck-Institute for Biochemistry, Martinsried,
                         82152, Germany
SOURCE:                  BMC Biotechnology (2006), 6, No pp. given
                         CODEN: BBMIE6; ISSN: 1472-6750
                         URL: http://www.biomedcentral.com/content/pdf/1472-
                         6750-6-9.pdf
PUBLISHER:               BioMed Central Ltd.
DOCUMENT TYPE:           Journal; (online computer file)
LANGUAGE:                English
AB   Background: With the availability of complete genomes, a systematic
     inventory of cellular processes becomes achievable. This requires
     assessing the function of all individual genes. Transfection of plasmid
     DNA into cell culture cells is an essential technique for this aim as it
     allows functional overexpression or downregulation of genes. While many
     robotic systems isolate plasmids for sequencing purposes, for more
     demanding applications such as transfections there is a shortage of
     robots for the high-throughput isolation of plasmid DNA. Results:
     Here we describe a custom-made, automated device, which uses a special
     protocol to isolate plasmid DNAs with a purity sufficient for efficient
     transfections into mammalian cells. Approx. 1,600 ultra pure plasmids can
     be isolated in a 96-well plate format within 12 h. As a unique
     feature the robot comprises the integration of a
     centrifuge instead of expensive columns, the use of a custom-made
     pipetting head with a movable gripper, especially designed shaking platforms
and
     an acetone wash facility. Conclusion: Using this robot we
     demonstrate how centrifugation steps with multiple pptns., most
     notably through a precipitation step of SDS in isopropanol, lead to high purity
     plasmid DNA and make possible high-throughput transfections into mammalian
     cells for functional gene annotations.
REFERENCE COUNT:         21    THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 2 OF 38  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2006:95831  CAPLUS
TITLE:                   An automated screening assay for determination of
                         aqueous equilibrium solubility enabling SPR study
                         during drug lead optimization
AUTHOR(S):               Tan, Helming; Semin, David; Wacker, Maggie; Cheetham,
                         Janet
CORPORATE SOURCE:        Amgen, Thousand Oaks, CA, USA
SOURCE:                  JALA (2005), 10(6), 364-373
                         CODEN: JALLFO; ISSN: 1535-5535
```

PUBLISHER: Elsevier Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Aqueous solubility is one of the most critical physicochem. properties to be determined in the process of drug lead optimization. Particularly, an equilibrium solubility method is highly valuable to the study of structure property relationship (SPR), while meeting the needs of anal. sensitivity, reproducibility, and throughput. In this report, an automated solubility assay in a 96-well library format was designed and developed by means of **robotic** liquid handling, **centrifugal** separation, and HPLC-UV quantification. Requiring 1 mg of solid compound, this assay was used to determine the equilibrium solubility in three user-selected media, i.e., 0.01 N HCl, phosphate buffer saline (PBS), and fasted state simulated intestinal fluid (SIF), with a throughput of up to 192 compds. a week. The assay parameters, including the equilibration time and the separation technique, were optimized to ensure that the thermodn. solubility was measured at the presence of excess solid compound A fast gradient HPLC method was developed with single-point on-**plate** calibration for each compound, followed by a customized 96-well chromatog. data anal. The reporting solubility range was 1-200 μg/mL, appropriate for oral drug candidate selection at the stage of discovery lead optimization. Based on the test results obtained on the com. available drugs and Amgen research compds., this assay was considered to be equivalent to the conventional shake-flask methods. Examples were given to demonstrate that the thermodn. solubility determined by this assay enabled the SPR study to support drug lead optimization.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:50999 CAPLUS
DOCUMENT NUMBER: 144:124532
TITLE: Immunodetection of mesothelin-/megakaryocyte potentiating factor family (MMPFF) peptides for assessment of the mesothelium and the mesothelial cavity
INVENTOR(S): O'Shannessy, Daniel J.; Sardesai, Niranjan; Somers, Elizabeth B.
PATENT ASSIGNEE(S): Fujirebio Diagnostics, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006014211	A1	20060119	US 2005-40240	20050121
WO 2005072341	A3	20060420	WO 2005-US2357	20050121

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-538072P P 20040121

AB The invention relates to methods and kits for assessing occurrence in patient mesothelial fluid of peptides having amino acid sequences related to those of mesothelin, megakaryocyte potentiating factor, and other peptides that have been associated with occurrence in the serum of mesothelioma patients. The mesothelin gene encodes a precursor protein that is processed to yield the 40-kDa protein, mesothelin, attached to the cell membrane by a glycosylphosphatidyl inositol linkage and a 31-kDa shed fragment named megakaryocyte-potentiating factor. The MMPFF (mesothelin/megakaryocyte potentiating factor family) peptide is assessed in patients urine by contacting the urine with an antibody that binds specifically with the MMPFF peptide. The methods and kits can be used to monitor the biochem. or pathol. status of a component of the corresponding mesothelial cavity in a patient, to predict development of such a pathol. status in an otherwise asymptomatic patient, or to assess the efficacy of a therapeutic method.

L6 ANSWER 4 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1341784 CAPLUS
DOCUMENT NUMBER: 144:120811
TITLE: Development of a high-throughput method for the determination of itraconazole and its hydroxy metabolite in human plasma, employing automated liquid-liquid extraction based on 96-well format **plates** and LC/MS/MS
AUTHOR(S): Kousoulos, Constantinos; Tsatsou, Georgia; Apostolou, Constantinos; Dotsikas, Yannis; Loukas, Yannis L.
CORPORATE SOURCE: Laboratory of Pharmaceutical Analysis and Bioequivalence Services (GLP Compliant), Department of Pharmaceutical Chemistry, School of Pharmacy, University of Athens, Panepistimioupoli Zografou, Athens, 157 71, Greece
SOURCE: Analytical and Bioanalytical Chemistry (2006), 384(1), 199-207
CODEN: ABCNBP; ISSN: 1618-2642
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A semi-automated liquid chromatog.-tandem mass spectrometry (LC/MS/MS) method was developed for the simultaneous quantification of the antifungal drug itraconazole (ITZ) and its coactive metabolite hydroxyitraconazole (OH-ITZ) in human plasma. The plasma samples underwent liquid-liquid extraction (LLE) in 2.2 mL 96 deepwell **plates**. ITZ, OH-ITZ and the internal standard (IS) R51012 were extracted from plasma, using a mixture of acetonitrile (ACN) and Me t-Bu ether (MTBE) as the organic solvent. This specific mixture, due to its composition, had a significant impact on the performance of the assay. All liquid transfer steps, including preparation of calibration stds. and quality control samples as well as the addition of the IS, were performed automatically using **robotic** liquid handling workstations for parallel sample processing. After vortexing, **centrifugation** and freezing, the supernatant organic solvent was evaporated The analytes and IS were dissolved in a small volume of a reconstitution solution, an aliquot of which was analyzed by combined reversed phase LC/MS/MS, with pos. ion electrospray ionization and a TurboIonSpray interface, using multiple reactions monitoring (MRM). The method was shown to be sensitive and specific to both ITZ and OH-ITZ, it revealed excellent linearity for the range of concns. 2-500 ng mL-1 for ITZ and 4-1000 ng mL-1 for OH-ITZ, it was very accurate and it gave very good inter- and intra-day precisions. The proposed high-throughput method was employed in a bioequivalence study after per os administration of two 100 mg tablets of ITZ, and it allowed this study to be completed in under four days.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1188532 CAPLUS
DOCUMENT NUMBER: 144:44949
TITLE: A Semi-Automated Procedure for the Determination of Caspofungin in Human Plasma Using Solid-Phase Extraction and HPLC with Fluorescence Detection Using Secondary Ionic Interactions to Obtain a Highly Purified Extract
AUTHOR(S): Bi, Sheng.; Schwartz, M.; Desai, R.; Miller, A.; Matuszewski, B.
CORPORATE SOURCE: Department of Drug Metabolism, Merck Research Laboratories, West Point, PA, USA
SOURCE: Journal of Liquid Chromatography & Related Technologies (2005), 28(18), 2895-2908
CODEN: JLCTFC; ISSN: 1082-6076
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A semi-automated assay for the determination of caspofungin in human plasma is presented. High assay throughput was achieved through the use of a **robotic** sample processor and 96 well format solid phase extraction Drug and internal standard (an isostere) were extracted from plasma using a silica based, C8 stationary phase. The extraction yielded a highly purified extract, as retention was mediated by a combination of reverse phase and secondary ionic interactions. Conditioned SPE **plates** (50 mg sorbent/well) were loaded with buffered (pH 4.9) plasma containing drug and internal standard The wells were washed with water and neat methanol prior to elution with a reagent optimized for both recovery and selectivity (0.25M ammonium hydroxide/0.05% trifluoroacetic acid in methanol). Excess residual water in the SPE wells during the methanol wash was found to cause variable drug recovery and was eliminated by **centrifugation** of the SPE **plate**. After evaporation of the SPE eluent, plasma exts. were dissolved in mobile phase and analyzed using a Keystone Betasil C18 anal. column (4.6 + 50 mm, 3 μm) with fluorescence detection (excitation 220 nm, emission 304 nm). The mobile phase was composed of a 38:62 (v:v) mixture of acetonitrile and 0.1% trifluoroacetic acid (adjusted to pH 3 with triethylamine) and was pumped at a flow rate of 1.5 mL/min. Seven-point calibration curves over the concentration range 125-10,000 ng/mL yielded a linear response (drug concentration vs. drug/internal standard peak height ratio) using a weighed (1/x) linear regression model. Based on the replicate analyses of spiked plasma stds., intra-day assay precision was better than 5.7% coefficient of variation (CV) and intra-day accuracy was within 1.7% of nominal at all points of the standard curve. Inter-day precision, as assessed by daily anal. of high, mid, and low concentration quality control samples, was better than 5.3% CV. Inter-day accuracy was within 10.7% of nominal value.
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:641599 CAPLUS
DOCUMENT NUMBER: 143:129479
TITLE: Automated laboratory system and analytical module
INVENTOR(S): Yavilevich, Michael
PATENT ASSIGNEE(S): Israel
SOURCE: U.S. Pat. Appl. Publ., 40 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005158212	A1	20050721	US 2004-965485	20041015
PRIORITY APPLN. INFO.:			US 2004-537093P P	20040115

AB Laboratory Automated System and method for specimen processing, comprising several Clin. and Biol. Anal. Modules is provided. The Module consists of coupling **centrifuge**, analyzers and **robot**. System produces rapid phase separation, cap removing and testing in one sequential, unbroken process. Several multi-item carriers for tubes and microplates loading provided.

L6 ANSWER 7 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:447330 CAPLUS
TITLE: Automatic waste fluid of microplate, agitation method and device [Machine Translation].
INVENTOR(S): Yamamoto, Eiji; Okutomi, Hideaki
PATENT ASSIGNEE(S): Life Tech K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005130837	A2	20050526	JP 2003-405182	20031030
PRIORITY APPLN. INFO.:			JP 2003-405182	20031030

AB [Machine Translation of Descriptors]. With the microplate **robot** which is used for protein synthesis and the like removal of the supernatant liquid inside the well of the microplate, the waste fluid of all liquid and agitation and mixture of the sample liquid simply, at the same time, method and the device which are done securely are offered. Removal of the supernatant liquid inside the well of the microplate covering the absorption pad which installs the absorber in the surface of the microplate where process such as **centrifugal** separation processing ends top and bottom movement and locking in the stage which counter normal rotation is done, moving stage to the upper part and after reversing, the supernatant liquid making the absorber absorb by falling to specified position it removes. When the waste fluid it does all liquid, it does with the operation of not using the absorption pad with the above-mentioned operation. Furthermore, when it agitates the sample liquid and it mixes, using the cover equipped microphone clo **plate** , after the locking, moving to the upper part in stage, it solved by the fact that at least it reverses above one time and normal rotation.

L6 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:996307 CAPLUS
DOCUMENT NUMBER: 141:391514
TITLE: Automated laboratory for high-throughput screening and RNA interference
INVENTOR(S): Vuong, Minh; Coassin, Peter J.; Flores, Javier; Grot, Brian; Hale, Daniel E.; Phan, Toung; Bennett, Todd; Nguyen, Huy; Rodems, Steve; Niles, Walter D.; Stack, Jeffrey H.
PATENT ASSIGNEE(S): Aurora Discovery, Inc., USA
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004099378	A2	20041118	WO 2004-US13497	20040430
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005054083	A1	20050310	US 2004-837218	20040430
PRIORITY APPLN. INFO.:			US 2003-467061P	P 20030430

AB The invention is an automated multiple-purpose, integrated laboratory system comprising interchangeable modular elements for the construction and measurement of biol. assays. The functions of the modular elements may include multiwell platform handling, chemical reagent or cell management, volumetric transfer of liqs. for assay construction or for recovery of reaction products for anal., incubation under controlled environmental conditions, measurement of spectrometric signals originating from the assays, processing and anal. of the resulting spectrometric data, and other functions. The modular elements are arranged around a number of **robotic** elements that deliver **plates** to different modular elements, transfer **plates** to groups of modules served by a different **robotic** element, or other actions necessary in **plate** handling. Liquid transfer to and from multiwell platforms, necessary for assay construction or for the initiation of physiol. events in cells, is partitioned among different modules specialized for transferring nanoliter or smaller volume quantities of chemical concs., or microliter quantities of assay reagents, cells, media and other assay constituents. Applications of this invention include the quantitation and anal. of the expression of multiple genes in cells, measurement of multi-gene expression kinetics, anal. of activation or suppression of multiple signal transduction pathways, screening chemical compds. for modulatory effects on multi-gene expression or on signal transduction pathways or on other biochem. networks of cells, or other anal. biol. or biochem. assays.

L6 ANSWER 9 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	2004:60376 CAPLUS
DOCUMENT NUMBER:	140:107758
TITLE:	Electron microscopy cell fraction sample preparation
INVENTOR(S):	Waterbury, Raymond; Kearney, Robert; Bergeron, John
PATENT ASSIGNEE(S):	McGill University, Can.
SOURCE:	PCT Int. Appl., 45 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004007076	A2	20040122	WO 2003-CA1068	20030716
WO 2004007076	A3	20040521		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,				

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003249804	A1	20040202	AU 2003-249804	20030716
EP 1525054	A2	20050427	EP 2003-763547	20030716

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.:	US 2002-195309	A	20020716
	WO 2003-CA1068	W	20030716

AB A parallel processing, fluid handling apparatus is disclosed for concurrent temperature controlled preparation of a plurality of cell fraction samples adapted to be used for electron microscopic viewing. The apparatus comprises generally a sample receiving member, a fluid handling means, and a separation means. The sample receiving member comprises a plurality of discrete apertures each adapted to receive a biol. sample therein. The fluid handling means for inserting and removing fluid to and from the plurality of apertures substantially in parallel, permits the biol. samples to be processed substantially in parallel by the insertion and removal of processing fluid. The separation means permits the parallel isolated separation of the post-processing samples. The post-processing samples are adapted to be polymerized in embedding solution and removed from the sample receiving member.

L6 ANSWER 10 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	2003:991774 CAPLUS
DOCUMENT NUMBER:	140:25147
TITLE:	**Centrifugal** cytology system, chamber block and method for the preparation of treated monolayers of sample material
INVENTOR(S):	Leif, Robert Cary
PATENT ASSIGNEE(S):	Newport Instruments, USA
SOURCE:	PCT Int. Appl., 54 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003104801	A1	20031218	WO 2003-US11394	20030414

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2482560	AA	20031218	CA 2003-2482560	20030414
AU 2003234730	A1	20031222	AU 2003-234730	20030414
EP 1504260	A1	20050209	EP 2003-728386	20030414

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

US 2005260100	A1	20051124	US 2005-512337	20050726
PRIORITY APPLN. INFO.:			US 2002-372549P	P 20020413
			WO 2003-US11394	W 20030414

AB An apparatus and method for the automated preparation of treated monolayers of sample material, comprising: a **centrifuge** having a rotor

carrying removable chamber blocks; sample and reagent **dispensers** and control systems. First, **centrifugal** force sediments sample material discretely to form a monolayer onto a receiving surface member on one of the chamber blocks, while the same **centrifugal** force opens a valve in the chamber block (14) to drain sample material. Then, **centrifugal** force delivers sequentially into discrete chamber blocks discrete treating agents, during which time the sampler material monolayer is held in place on the receiving surface member by **centrifugal** force. Then, each chamber block is drained **centrifugally** through its already opened valve. Each treated sampler material is confined to an individual chamber block. Batch and random access delivery of treating agents can be employed. Each chamber block includes sep. inlets for the sample and treating agents.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:967557 CAPLUS

DOCUMENT NUMBER: 140:174343

TITLE: Quantitation of SU11248, an oral multi-target tyrosine kinase inhibitor, and its metabolite in monkey tissues by liquid chromatograph with tandem mass spectrometry following semi-automated liquid-liquid extraction

AUTHOR(S): Baratte, S.; Sarati, S.; Frigerio, E.; James, C. A.; Ye, C.; Zhang, Q.

CORPORATE SOURCE: Global Drug Metabolism, Nerviano, 20014, Italy

SOURCE: Journal of Chromatography, A (2004), 1024(1-2), 87-94
CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB SU11248 is a potent inhibitor of PDGFR, VEGFR, KIT, and Flt3, and is currently under Phase I clin. evaluation as an anticancer drug. A sensitive and specific anal. method for the quantitation of SU11248 and its metabolite in several monkey tissues (liver, kidney, brain and white fat) using LC-MS-MS following semi-automated liquid-liquid extraction (LLE) was developed and validated. Amts. of 50 mg of tissue were homogenized using an ultrasonic processor. After addition of the stable labeled internal standard (IS) and ammonium hydroxide (0.3%), samples were extracted with 2.5 mL of tert-Bu Me ether. Following **centrifugation**, aliquots of 1.8 mL of the organic phase were transferred into a 96-well **plate**. The Packard Multiprobe II **robotic** liquid handler was used to perform all steps mentioned above. The organic phase was dried and the residue was reconstituted with 800 μL of 15 mM ammonium formate buffer solution (pH 3.25) using a Tomtec Quadra 96 workstation. Aliquots of 10 μL of the resulting solution were injected into the LC-MS-MS system. A Symmetry Shield C8 column (50 mm+2.1 mm, 3.5 μm) was used to perform the chromatog. anal. The mobile phase was 15 mM ammonium formate buffer solution (pH 3.25)-MeCN (74:26 (volume/volume)) with a flow-rate of 0.35 mL/min. Retention times of the metabolite and SU11248 were .apprx.2.5 and 3.5 min, resp. Total cycle time was 5 min. MS detection used the Applied Biosystems-MDS Sciex API 3000 with TurboIonSpray interface and multiple reaction monitoring (MRM) operated in pos. ion mode. The method was validated for both compds. over the calibration range of .apprx.2 and 2000 ng/g. The suitability and robustness of the method for in vivo samples were confirmed by anal. of monkey tissues from animals dosed with SU11248.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:367989 CAPLUS

DOCUMENT NUMBER: 139:31407

TITLE: DASH-2: Flexible, low-cost, and high-throughput SNP

genotyping by dynamic allele-specific hybridization on membrane arrays
AUTHOR(S): Jobs, Magnus; Howell, W. Mathias; Stroemqvist, Linda; Mayr, Torsten; Brookes, Anthony J.
CORPORATE SOURCE: Center for Genomics and Bioinformatics, Karolinska Institute, Stockholm, S-171 77, Swed.
SOURCE: Genome Research (2003), 13(5), 916-924
CODEN: GEREFS; ISSN: 1088-9051
PUBLISHER: Cold Spring Harbor Laboratory Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Genotyping technologies need to be continually improved in terms of their flexibility, cost-efficiency, and throughput, to push forward genome variation anal. To this end, we have leveraged the inherent simplicity of dynamic allele-specific hybridization (DASH) and coupled it to recent innovations of **centrifugal** arrays and iFRET. We have thereby created a new genotyping platform we term DASH-2, which we demonstrate and evaluate in this report. The system is highly flexible in many ways (any **plate** format, PCR multiplexing, serial and parallel array processing, spectral-multiplexing of hybridization probes), thus supporting a wide range of application scales and objectives. Precision is demonstrated to be in the range 99.8-100%, and assay costs are 0.05 USD or less per genotype assignment. DASH-2 thus provides a powerful new alternative for genotyping practice, which can be used without the need for expensive **robotics** support.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:282454 CAPLUS
DOCUMENT NUMBER: 138:289769
TITLE: Methods and means for creating arrays
INVENTOR(S): Brookes, Anthony Joseph; Howell, Walter Mathias; Jobs, Magnus
PATENT ASSIGNEE(S): Dynametrix Limited, UK; Karolinska Innovations Ab
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003028878	A1	20030410	WO 2002-GB4261	20020918

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-23391 A 20010928
US 2001-325694P P 20010928

AB This invention relates to methods and means for the immobilization of arrays from sample mols. of interest present within micro-formatted sample vessels (such as 1,536-well microtiter **plates**) onto a solid surface. The mols. of interest are immobilized by **centrifugal** transfer onto a solid planar or flexible surface (e.g. membrane) placed over an initial sample vessel. The sample transfer principle is free of complex liquid-handling manipulation and expensive **robotic** devices

and is applicable to any number of different starting vessel and destination surface combinations of almost any scale or d.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:717098 CAPLUS
DOCUMENT NUMBER: 137:211914
TITLE: Computer implemented nucleic acid isolation method and apparatus
INVENTOR(S): Heath, Ellen M.; Shuman, Ruth
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U. S. Ser. No. 255,146.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002133002	A1	20020919	US 1999-361829		19990727
JP 2002541773	T2	20021210	JP 2000-600225		20000222
PRIORITY APPLN. INFO.:			US 1999-255146	A2	19990222
			US 1999-361829	A	19990727
			WO 2000-US4483	W	20000222

AB A computer program module and computer system for issuing controls to an automated DNA isolation apparatus includes a series of sub-program modules for controlling the operation of generic processes of DNA isolation. The sub-modules may be used to construct an automated DNA isolation protocol specific to the user's purpose. In other embodiments, a computer program module and computer system issue controls to an automated nucleic acids isolation apparatus including subprogram modules for controlling nucleic acid isolation functions.

L6 ANSWER 15 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:616286 CAPLUS
DOCUMENT NUMBER: 137:137243
TITLE: Method and apparatus for biological material separation
INVENTOR(S): Robinson, Donna L.
PATENT ASSIGNEE(S): The Regents of The University of California, USA
SOURCE: U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002110923	A1	20020815	US 2001-782324	20010212
US 6890740	B2	20050510		
PRIORITY APPLN. INFO.:			US 2001-782324	20010212

AB There has been invented an apparatus comprising a separation barrier for excluding denser cell materials from less dense cell materials after **centrifuging** of the cells so that selected materials can be withdrawn from the less dense cell materials without inclusion of the denser cell materials or clogging of sampling equipment with denser cell materials. Cells from which selected material is to be withdrawn are **centrifuged**, either as cells or cells in media. Once the denser cell materials are isolated in a layer by **centrifugal** force, an

invention screen or sieve is submerged in the less dense cell material to a level above the layer of denser cell materials to isolate the denser cell materials from the less dense cell materials, preventing mixing of the denser cell materials back into the less dense cell materials when the cells or the cells in media are no longer being **centrifuged** and to prevent clogging of sampling equipment with denser cell materials. In a particularly useful application of the invention method and apparatus, plasmid DNA can be withdrawn from less dense cell materials without contamination or interference with denser cell materials.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:64698 CAPLUS
DOCUMENT NUMBER: 134:246830
TITLE: A clinical trial on a **plate**? the potential of 384-well format solid phase extraction for high-throughput bioanalysis using liquid chromatography/tandem mass spectrometry
AUTHOR(S): Biddlecombe, Robert A.; Benevides, Christopher; Pleasance, Stephen
CORPORATE SOURCE: Department of International Bioanalysis, Division of Bioanalysis and Drug Metabolism, Glaxo Wellcome R and D, Ware, SG12 0DP, UK
SOURCE: Rapid Communications in Mass Spectrometry (2001), 15(1), 33-40
CODEN: RCMSEF; ISSN: 0951-4198
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The application of 384-well format solid phase extraction (SPE) for bioanal. using liquid chromatog./tandem mass spectrometry (LC/MS/MS) is reported and a 384-well SPE method for the 5-HT agonist sumatriptan in human plasma described. Plasma samples were extracted on a prototype low-d. polyethylene 384-well SPE block using a packed bed of 5 mg Oasis HLB. Liquid handling was automated by a combination of a **robotic** sampler processor and a 96/384 multichannel **dispensing** station. Samples and SPE reagents were drawn through the SPE block by **centrifugation**. The exts. were analyzed by LC/MS/MS with thermally and pneumatically assisted electrospray ionization and selected reaction monitoring. The method is used to illustrate and discuss the feasibility and viability of sample preparation techniques in high-d. microtiter **plate** format for routine bioanal.
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:772821 CAPLUS
DOCUMENT NUMBER: 133:307293
TITLE: Microelectromechanical devices useful for manipulating cells or embryos, kits thereof, methods of making same, and methods of use thereof
INVENTOR(S): Palacios-Boyce, Monica
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 142 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000065137	A1	20001102	WO 2000-US11040	20000424

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2406572	AA	20001102	CA 2000-2406572	20000424
EP 1204790	A1	20020515	EP 2000-926333	20000424

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

PRIORITY APPLN. INFO.:

US 1999-130802P	P	19990423
US 1999-147802P	P	19990809
US 1999-149269P	P	19990817
WO 2000-US11040	W	20000424

AB The present invention relates generally to microelectromech. systems (MEMS) devices for the manipulation of cells or groups of cells, such as oocytes, embryos, and sperm. In particular, the present invention relates to Cell Labeling MEMS devices (2F), Microinjection MEMS devices, IntraCytoplasmic Sperm Injection ("ICSI") MEMS devices, Zona Coring MEMS devices, Enucleation MEMS devices, Enucleation/Nuclear Transfer MEMS devices, and Cytoplasmic Transfer MEMS devices. The present invention also relates to kits containing the MEMS devices of the present invention.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:535046 CAPLUS
DOCUMENT NUMBER: 133:137073
TITLE: Apparatus and method for separation of liquid phases of different density and for fluorous phase organic syntheses
INVENTOR(S): Lebl, Michael
PATENT ASSIGNEE(S): Illumina, Inc., USA
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000044491	A2	20000803	WO 2000-US2233	20000128
WO 2000044491	A3	20001221		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2361223	AA	20000803	CA 2000-2361223	20000128
EP 1154848	A2	20011121	EP 2000-905806	20000128

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2002539913	T2	20021126	JP 2000-595781	20000128
AU 771720	B2	20040401	AU 2000-27431	20000128
US 6846460	B1	20050125	US 2000-493741	20000128
US 2004208797	A1	20041021	US 2004-838582	20040503

PRIORITY APPLN. INFO.: US 1999-118377P P 19990129
US 2000-493741 A1 20000128
WO 2000-US2233 W 20000128

AB A simple, efficient apparatus and method for separating layers of immiscible or partially miscible liqs. useful in methods of high-throughput combinatorial organic synthesis or parallel extraction of large libraries or megaarays of organic compds. is disclosed. The apparatus and method are useful, whether as part of an automated, **robotic** or manual system for combinatorial organic synthesis or purification (extraction). In a preferred embodiment, an apparatus and method for separating layers of immiscible or partially miscible liqs. compatible with microtiter **plate** type array(s) of reaction vessels is disclosed. Another application of **centrifugation** based liquid removal was found for washing the **plates** in biol. assays or synthesis on modified substrates.

L6 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:421009 CAPLUS
DOCUMENT NUMBER: 133:40208
TITLE: Ultrafiltration device and method of forming same
INVENTOR(S): Bowers, William F.; Yanlopoulos, Basil; Towle, Timothy
PATENT ASSIGNEE(S): Orbital Biosciences, Llc, USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035565	A2	20000622	WO 1999-US28757	19991203
WO 2000035565	A3	20001123		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6269957	B1	20010807	US 1999-454391	19991203
EP 1144094	A2	20011017	EP 1999-964102	19991203
EP 1144094	B1	20040317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002532219	T2	20021002	JP 2000-587873	19991203
AT 261760	E	20040415	AT 1999-964102	19991203
US 2001054584	A1	20011227	US 2001-923017	20010806

PRIORITY APPLN. INFO.: US 1998-111068P P 19981204
US 1999-116890P P 19990122
US 1999-454391 A1 19991203
WO 1999-US28757 W 19991203

AB An ultrafiltration device has a filter membrane sealed inside a reservoir body, such as a tube. The tube has one or more ports and a closed portion distal to the port(s), and the filter membrane is sealed to the body along a closed contour widely surrounding the port(s) to provide a large area filtered outflow path. The method is effective to rapidly isolate a predetd. amount of a desired retentate in the distal portion of the tube. The method and device are also useful for quant. transfer of smaller mols. and for multi-step processing of sample arrays. The vessels have a high filter area to volume ratio, maintain open filter surfaces and high rates of filtration throughout the spin, and are fully compatible with

robotic loading, multistage operation and in situ multiwell **plate** filtrate and/or retentate assay or transfer. Attachment of the filter may be effected by heat welding. Preferably the vessel and filter are positioned between a press member and a heat sink and a super heated tool contacts the press member to selectively deliver a defined bolus of heat to the weld areas.

L6 ANSWER 20 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:350620 CAPLUS
DOCUMENT NUMBER: 131:7158
TITLE: Apparatus and method for separation of liquid and solid phases for solid phase organic syntheses
INVENTOR(S): Lebl, Michal
PATENT ASSIGNEE(S): Trega Biosciences, Inc., USA
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9925470	A1	19990527	WO 1998-US24519	19981117
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2309753	AA	19990527	CA 1998-2309753	19981117
AU 9914154	A1	19990607	AU 1999-14154	19981117
AU 751424	B2	20020815		
EP 1032469	A1	20000906	EP 1998-958035	19981117
EP 1032469	B1	20030312		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001523550	T2	20011127	JP 2000-520898	19981117
AT 234149	E	20030315	AT 1998-958035	19981117
CZ 295859	B6	20051116	CZ 2000-1875	19981117

PRIORITY APPLN. INFO.: US 1997-974090 A 19971119
WO 1998-US24519 W 19981117

AB A simple efficient apparatus and method are described for separation of solid and liquid phases in high through-put combinatorial organic synthesis of large libraries or mega-arrays of organic compds. The separation method for separating liquid from a solid phase during the organic synthesis process comprises positioning a reaction vessel or one or more arrays of reaction vessels, e.g., microtiter **plates**, containing a slurry of solid phase particles or beads in a liquid, on the perimeter of a **centrifuge** rotor in a tilted or non-tilted position, and spinning the rotor of the **centrifuge** at a speed so that the solid phase particles sediment in a "pocket" of the vessels and the liquid phase is expelled from the vessels. The apparatus and method are useful as part of an automated **robotic** or manual system for combinatorial organic synthesis. In a preferred embodiment, an apparatus and method of removal of liquid from solid phase compatible with microtiter **plate** array(s) of reaction vessels is described. In an example, the separation method was used in the synthesis of tetrahydroisoquinolinones.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 21 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:672693 CAPLUS
DOCUMENT NUMBER: 129:272649
TITLE: Biomolecular processor for isolation and purification of nucleic acids
INVENTOR(S): Fields, Robert E.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9842874	A2	19981001	WO 1998-US6029	19980323
WO 9842874	A3	19981223		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9867790	A1	19981020	AU 1998-67790	19980323
EP 972080	A2	20000119	EP 1998-913175	19980323
EP 972080	B1	20050323		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 291637	E	20050415	AT 1998-913175	19980323
US 2003027203	A1	20030206	US 2002-243521	20020912

PRIORITY APPLN. INFO.:			
US 1997-41237P	P	19970324	
WO 1998-US6029	W	19980323	
US 1999-381603	B1	19990922	

AB A process and apparatus are described for isolating and purifying nucleic acids and other target mols. directly from blood, plasma, urine, cell cultures and the like by totally automated means, without **centrifugation**, **aspiration** or vacuum. After mixing and heating a nucleic acid containing sample with lysis reagent in an environmentally isolated compartment, nucleic acids are absorbed onto a binding filter and eluted in a small volume using heated elution reagent. A preferred embodiment purifies nucleic acids and automatically detects target sequences from a sample of fresh blood. Another embodiment purifies target mols. from a multitude of samples held in microtiter **plates**. Test kits for each embodiment include disposable isolation and detection devices and associated reagents.

L6 ANSWER 22 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:346160 CAPLUS
DOCUMENT NUMBER: 125:12086
TITLE: Apparatus for automatically determining the rate of plasticizer absorption of resin powders
INVENTOR(S): Kitamura, Hajime; Takeuchi, Masaru; Yoshikoshi, Hideo; Kitai, Mikio; Chino, Takashi; Nogami, Yuji; Yashiro, Hajime; Kato, Keisuke
PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5492023	A	19960220	US 1993-171738	19931222
JP 06201559	A2	19940719	JP 1993-96	19930104
JP 3091988	B2	20000925		

PRIORITY APPLN. INFO.: JP 1993-96 A 19930104

AB Title apparatus is useful for powdery resins such as a vinyl chloride resins. The rate of plasticizer absorption is determined by treating, in a **centrifugal** separator, a powdery resin from an inspection container together with an excess of a plasticizer, to remove from the powdery resin the excess plasticizer, and determining the amount of the plasticizer absorbed by and remaining in the powdery resin. The apparatus includes an electronic balance for weighing out the powdery resin which is connected to an arithmetic circuit; an injection means for injecting the plasticizer into the powdery resin; a disposal chute for recovering the inspection container used in the weight-determination; and a suction device for **aspirating** the plasticizer separated by and remaining in the **centrifugal** separator. The apparatus also includes a **robot** for transferring the powdery resin from the inspection container to the electronic balance, a plasticizer-injection means, a **centrifugal** separator or a disposal chute; and a driving unit for moving an **aspiration** port of the suction device up and down within the **centrifugal** separator.

L6 ANSWER 23 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:752813 CAPLUS
DOCUMENT NUMBER: 123:189616
TITLE: A high throughput system for the preparation of single stranded templates grown in microculture
AUTHOR(S): Kilner, Douglas E.; Guilfoyle, Richard A.; SMith, Lloyd M.
CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, 53706-1396, USA
SOURCE: DNA Sequence (1994), 4(4), 253-7
CODEN: DNSEES; ISSN: 1042-5179
PUBLISHER: Harwood
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A high throughput system for the preparation of single stranded M13 sequencing templates is described. Supernatants from clones grown in 48-well **plates** are treated with a chaotropic agent to dissociate the phage coat protein. Using a semi-automated cell harvester, the free nucleic acid is bound to a glass fiber filter in the presence of chaotrope and then washed with ethanol by **aspiration**. Individual glass fiber disks are punched out on the cell harvester and dried briefly. The DNA samples are the eluted in water by **centrifugation**. The processing time from 96 microcultures to sequence quality templates is approx. 1 h. Assuming the ability to sequence 400 bases per clone, a 0.5 megabase per day genome sequencing facility will require 6250 purified templates a week. Toward accomplishing this goal we have developed a procedure which is a modification of a method that uses a chaotropic agent and glass fiber filter. By exploiting the ability of a cell harvester to uniformly **aspirate** and wash 96 samples, a rapid system for high quality template preparation has been developed. Other semi-automated systems for template preparation have been developed using com. available **robotic** work-stations like the Biomek. Although minimal human intervention is required, processing time is at least twice as long. Custom systems based on paramagnetic beads produce DNA in insufficient quantity for direct sequencing and therefore require cycle sequencing these systems require custom programing, have a fairly high initial cost and have not proven to be as fast as the method reported here.

L6 ANSWER 24 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:526257 CAPLUS
DOCUMENT NUMBER: 121:126257
TITLE: A high throughput system for the preparation of single stranded templates grown in microculture
AUTHOR(S): Kolner, Douglas E.; Guilfoyle, Richard A.; Smith, Lloyd M.
CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, 53706-1396, USA
SOURCE: DNA Sequence (1994), 4(4), 253-7
CODEN: DNSEES; ISSN: 1042-5179
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A high throughput systems for the preparation of single stranded M13 sequencing templates is described. Supernatants from clones grown in 48-well **plates** are treated with a chaotropic agent to dissociate the phage coat protein. Using a semi-automated cell harvester, the free nucleic acid is bound to a glass fiber filter in the presence of chaotrope and then washed with ethanol by **aspiration**. Individual glass fiber disks are punched out on the cell harvester and dried briefly. The DNA samples are then eluted in water by **centrifugation**. The processing time from 96 microcultures to sequence quality templates is approx. 1 h. Assuming the ability to sequence 400 bases per clone, a 0.5 megabase per day genome sequencing facility will require 6250 purified templates a week. Toward accomplishing this goal the authors have developed a procedure which is a modification of a method that uses a chaotropic agent and glass fiber filter (T. Kristensen et al., 1987). By exploiting the ability of a cell harvester to uniformly **aspirate** and wash 96 samples, a rapid system for high quality template preparation has been developed. Other semi-automated systems for template preparation have been developed using com. available **robotic** work-stations like the Biomek (E. R Mardis and B. Roe, 1989). Although minimal human intervention is required, processing time is at least twice as long. Custom systems based on paramagnetic beads (T. Hawkins et al., 1992) produced DNA in insufficient quantity for direct sequencing and therefore require cycle sequencing. These systems required custom programing, have a fairly high initial cost and have not proven to be as fast as the method reported here.

L6 ANSWER 25 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:404313 CAPLUS
DOCUMENT NUMBER: 119:4313
TITLE: High-throughput DNA preparation system
AUTHOR(S): Garner, Harold R.; Armstrong, Barbara; Kramarsky, Daniel A.
CORPORATE SOURCE: Dev. Adv. Technol. Gen. At., San Diego, CA, 92186, USA
SOURCE: Genetic Analysis: Techniques and Applications (1992), 9(5-6), 134-9
CODEN: GATAEV; ISSN: 1050-3862
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A system demonstrating the feasibility of high-throughput, **centrifugation**-based DNA sepns. and purifications has been constructed and tested. Samples are currently processed at a rate of 96 in .apprx.2-3 h. The device implements an automation-optimized alkaline lysis protocol for the rapid extraction of plasmid or cosmid DNA from 1-mL bacteria cultures. The conditions for optimal culturing in deep-well (96 + 1 mL) microwell **plates** have been developed, and all sample manipulations are done within these **plates**. The use of microwell **plates** was essential to obtain high throughput and make manipulations following the DNA preparation (prep) easier because they can then be manipulated using a variety of com. available **robots**. The entire prep system is constructed above a Beckman GPR **centrifuge** and operated under Macintosh IIcx control. This device

has systems for fluid handling, microwell-**plate** manipulations, and **centrifuge** rotor alignment.

L6 ANSWER 26 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:602661 CAPLUS
DOCUMENT NUMBER: 115:202661
TITLE: Automated **robotic** extraction of proteins from plant tissue samples
AUTHOR(S): Brumback, Thomas B., Jr.
CORPORATE SOURCE: Pioneer Hi-Bred Int., Johnston, IA, 50131, USA
SOURCE: Advances in Laboratory Automation Robotics (1991), 7, 815-31
CODEN: ALOREY
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A custom **robotic** system (Bohdan Automation, Chicago, IL) was developed to automate the extraction of proteins from plant samples. Leaf or callus material (5-25 mg) is presented to the **robot** in 1.5 mL microcentrifuge tubes, the system performs buffer **dispensing**, grinding, **centrifugation**, and pipetting unit operations, and a cleared supernatant is delivered in a 96-well microassay **plate** format for subsequent anal. The system consists of 2 overhead X-Y-Z arms, an Allen-Bradley programmable logic controller (Cleveland, OH), a microcomputer for user interface and control, and several custom peripheral devices for sample handling and grinding. The system is housed on a 4 + 5-ft table and contains a back-up power supply and a refrigeration unit to prevent sample degradation The unit operates in a batch mode and is capable of processing >100 samples/h. The design, development, and performance of the system are discussed.

L6 ANSWER 27 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 2006(12):7526 COMPENDEX
TITLE: High-throughput isolation of ultra-pure plasmid DNA by a **robotic** system.
AUTHOR: Kachel, Volker (Imperial College London, London W12 0NN, United Kingdom); Sindelar, Georg; Grimm, Stefan
SOURCE: BMC Biotechnology v 6 Feb 16 2006 2006. 8p, arn: 9
CODEN: BBMIE6 ISSN: 1472-6750 E-ISSN: 1472-6750
PUBLICATION YEAR: 2006
DOCUMENT TYPE: Journal
TREATMENT CODE: General Review
LANGUAGE: English
AN 2006(12):7526 COMPENDEX
AB Background: With the availability of complete genomes, a systematic inventory of cellular processes becomes achievable. This requires assessing the function of all individual genes. Transfection of plasmid DNA into cell culture cells is an essential technique for this aim as it allows functional overexpression or downregulation of genes. While many **robotic** systems isolate plasmids for sequencing purposes, for more demanding applications such as transfections there is a shortage of **robots** for the high-throughput isolation of plasmid DNA. Results: Here we describe a custom-made, automated device, which uses a special protocol to isolate plasmid DNAs with a purity sufficient for efficient transfections into mammalian cells. Approximately 1,600 ultra pure plasmids can be isolated in a 96-well **plate** format within 12 hours. As a unique feature the **robot** comprises the integration of a **centrifuge** instead of expensive columns, the use of a custom-made pipetting head with a movable gripper, especially designed shaking platforms and an acetone wash facility. Conclusion: Using this **robot** we demonstrate how **centrifugation** steps with multiple precipitations, most notably through a precipitation step of SDS in isopropanol, lead to high purity plasmid DNA and make possible high-throughput transfections into mammalian cells for functional gene annotations. $CPY 2006 Kachel et al; licensee BioMed Central Ltd. 21 Refs.

L6 ANSWER 28 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 2006(3):4620 COMPENDEX
TITLE: An automated screening assay for determination of aqueous equilibrium solubility enabling SPR study during drug lead optimization.
AUTHOR: Tan, Helming (Department of Discovery Analytical Sciences Amgen, Thousand Oaks, CA 91320, United States); Semin, David; Wacker, Maggie; Cheetham, Janet
SOURCE: JALA - Journal of the Association for Laboratory Automation v 10 n 6 December 2005 2005.p 364-373
CODEN: JALLFO ISSN: 1535-5535 E-ISSN: 1540-2452
PUBLICATION YEAR: 2005
DOCUMENT TYPE: Journal
TREATMENT CODE: Experimental
LANGUAGE: English
AN 2006(3):4620 COMPENDEX
AB Aqueous solubility is one of the most critical physicochemical properties to be determined in the process of drug lead optimization. Particularly, an equilibrium solubility method is highly valuable to the study of structure property relationship (SPR), while meeting the needs of analytical sensitivity, reproducibility, and throughput. In this report, an automated solubility assay in a 96-well library format was designed and developed by means of **robotic** liquid handling, **centrifugal** separation, and HPLC-UV quantification. Requiring 1 mg of solid compound, this assay was used to determine the equilibrium solubility in three user-selected media, that is, 0.01 N HCl, phosphate buffer saline (PBS), and fasted state simulated intestinal fluid (SIF), with a throughput of up to 192 compounds a week. The assay parameters, including the equilibration time and the separation technique, were optimized to ensure that the thermodynamic solubility was measured at the presence of excess solid compound. A fast gradient HPLC method was developed with single-point on-**plate** calibration for each compound, followed by a customized 96-well chromatographic data analysis. The reporting solubility range was 1-200 mug/mL, appropriate for oral drug candidate selection at the stage of discovery lead optimization. Based on the test results obtained on the commercially available drugs and Amgen research compounds, this assay was considered to be equivalent to the conventional shake-flask methods. Examples were given to demonstrate that the thermodynamic solubility determined by this assay enabled the SPR study to support drug lead optimization. Copyright $CPY 2005 by The Association for Laboratory Automation. 20 Refs.

L6 ANSWER 29 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 2005(52):11930 COMPENDEX
TITLE: Development of a high-throughput method for the determination of itraconazole and its hydroxy metabolite in human plasma, employing automated liquid-liquid extraction based on 96-well format **plates** and LC/MS/MS.
AUTHOR: Kousoulos, Constantinos (Department of Pharmaceutical Chemistry School of Pharmacy University of Athens, 157 71 Athens, Greece); Tsatsou, Georgia; Apostolou, Constantinos; Dotsikas, Yannis; Loukas, Yannis L.
SOURCE: Analytical and Bioanalytical Chemistry v 384 n 1 January 2006 2006.p 199-207
CODEN: ABCNBP ISSN: 1618-2642 E-ISSN: 1618-2650
PUBLICATION YEAR: 2006
DOCUMENT TYPE: Journal
TREATMENT CODE: Experimental
LANGUAGE: English
AN 2005(52):11930 COMPENDEX
AB A semi-automated liquid chromatography-tandem mass spectrometry (LC/MS/MS) method was developed for the simultaneous quantification of the antifungal

drug itraconazole (ITZ) and its coactive metabolite hydroxyitraconazole (OH-ITZ) in human plasma. The plasma samples underwent liquid-liquid extraction (LLE) in 2.2 mL 96 deepwell **plates**. ITZ, OH-ITZ and the internal standard (IS) R51012 were extracted from plasma, using a mixture of acetonitrile (ACN) and methyl t-butyl ether (MTBE) as the organic solvent. This specific mixture, due to its composition, had a significant impact on the performance of the assay. All liquid transfer steps, including preparation of calibration standards and quality control samples as well as the addition of the IS, were performed automatically using **robotic** liquid handling workstations for parallel sample processing. After vortexing, **centrifugation** and freezing, the supernatant organic solvent was evaporated. The analytes and IS were dissolved in a small volume of a reconstitution solution, an aliquot of which was analyzed by combined reversed phase LC/MS/MS, with positive ion electrospray ionization and a TurboIonSpray interface, using multiple reactions monitoring (MRM). The method was shown to be sensitive and specific to both ITZ and OH-ITZ, it revealed excellent linearity for the range of concentrations 2-500 ng mL-1 for ITZ and 4-1000 ng mL-1 for OH-ITZ, it was very accurate and it gave very good inter- and intra-day precisions. The proposed high-throughput method was employed in a bioequivalence study after per os administration of two 100 mg tablets of ITZ, and it allowed this study to be completed in under four days. 21 Refs.

L6 ANSWER 30 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 2005(47):8547 COMPENDEX
TITLE: A semi-automated procedure for the determination of caspofungin in human plasma using solid-phase extraction and HPLC with fluorescence detection using secondary ionic interactions to obtain a highly purified extract.
AUTHOR: Bi, Sheng (Department of Drug Metabolism Merck Research Laboratories, West Point, PA 19486, United States); Schwartz, M.S.; Desai, R.B.; Miller, A.R.; Matuszewski, B.K.
SOURCE: Journal of Liquid Chromatography and Related Technologies v 28 n 18 2005.p 2895-2908
CODEN: JLCTFC ISSN: 1082-6076 E-ISSN: 1520-572X
PUBLICATION YEAR: 2005
DOCUMENT TYPE: Journal
TREATMENT CODE: Experimental
LANGUAGE: English
AN 2005(47):8547 COMPENDEX
AB A semi-automated assay for the determination of caspofungin in human plasma is presented. High assay throughput was achieved through the use of a **robotic** sample processor and 96 well format solid phase extraction (SPE). Drug and internal standard (an isostere) were extracted from plasma using a silica based, C8 stationary phase. The extraction yielded a highly purified extract, as retention was mediated by a combination of reverse phase and secondary ionic interactions. Conditioned SPE **plates** (50 mg sorbent/well) were loaded with buffered (pH 4.9) plasma containing drug and internal standard. The wells were washed with water and neat methanol prior to elution with a reagent optimized for both recovery and selectivity (0.25 M ammonium hydroxide/0.05% trifluoroacetic acid in methanol). Excess residual water in the SPE wells during the methanol wash was found to cause variable drug recovery and was eliminated by **centrifugation** of the SPE **plate**. After evaporation of the SPE eluent, plasma extracts were dissolved in mobile phase and analyzed using a Keystone Betasil C18 analytical column (4.6 * 50 mm, 3 mum) with fluorescence detection (excitation 220 nm, emission 304 nm). The mobile phase was composed of a 38:62 (v:v) mixture of acetonitrile and 0.1% trifluoroacetic acid (adjusted to pH 3 with triethylamine) and was pumped at a flow rate of 1.5 mL/minute. Seven-point calibration curves over the concentration range 125-10.000 ng/mL yielded a

linear response (drug concentration vs drug/internal standard peak height ratio) using a weighed (1\x) linear regression model. Based on the replicate analyses (n = 5) of spiked plasma standards, intra-day assay precision was better than 5.7% coefficient of variation (CV) and intra-day accuracy was within 1.7% of nominal al all points of the standard curve. Inter-day precision, as assessed by daily analysis of high, mid, and low concentration quality control samples (n = 6), was better than 5.3% CV. Inter-day accuracy was within 10.7% of nominal value. Copyright $CPY Taylor & Francis, Inc. 8 Refs.

L6 ANSWER 31 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 2004(24):5463 COMPENDEX
TITLE: Automated liquid-liquid methodology for high throughput bioanalysis of drugs.
AUTHOR: Bourg, Serge (MDS Pharma Services Inc., St-Laurent, Que. H4R 2N6, Canada); Leblanc, Yves G.; Grandmaison, Charles
MEETING TITLE: Porceedings - 50th ASMS Conference on Mass Spectrometry and Allied Topics.
MEETING ORGANIZER: American Society for Mass Spectrometry (ASMS)
MEETING LOCATION: Orlando, FL, United States
MEETING DATE: 02 Jun 2002-06 Jun 2002
SOURCE: Proceedings 50th ASMS Conference on Mass Spectrmetry and Allied Topics 2002.p 427-428
PUBLICATION YEAR: 2002
MEETING NUMBER: 62646
DOCUMENT TYPE: Conference Article
TREATMENT CODE: Experimental
LANGUAGE: English
AN 2004(24):5463 COMPENDEX
AB An automated liquid-liquid sample preparation methodology for high throughput bioanalysis of drugs was discussed. The standards, quality controls, blanks and unknown samples were **centrifuged** and positioned on a Packard Multiprobe liquid handler according to the injection sequence. It was observed that the extraction procedure provided consistent and similar recovery to the original manual procedure while using less solvent and allowing a higher throughput. It was suggested that using the automated process, a 96-well **plate** of samples can be extracted in about 30 minutes.(Edited abstract)

L6 ANSWER 32 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 2004(1):3875 COMPENDEX
TITLE: Quantitation of SU11248, an oral multi-target tyrosine kinase inhibitor, and its metabolite in monkey tissues by liquid chromatograph with tandem mass spectrometry following semi-automated liquid-liquid extraction.
AUTHOR: Baratte, S. (Global Drug Metabolism Pharmacia, 20014 Nerviano, Italy); Sarati, S.; Frigerio, E.; James, C.A.; Ye, C.; Zhang, Q.
SOURCE: Journal of Chromatography A v 1024 n 1-2 Jan 23 2004 2004.p 87-94
CODEN: JCRAEY ISSN: 0021-9673
PUBLICATION YEAR: 2004
DOCUMENT TYPE: Journal
TREATMENT CODE: Theoretical
LANGUAGE: English
AN 2004(1):3875 COMPENDEX
AB SU11248 is a potent inhibitor of PDGFR, VEGFR, KIT, and Flt3, and is currently under Phase I clinical evaluation as an anticancer drug. A sensitive and specific analytical method for the quantitation of SU11248 and its metabolite in several monkey tissues (liver, kidney, brain and white fat) using LC-MS-MS following semi-automated liquid-liquid extraction (LLE) was developed and validated. Amounts of 50mg of tissue were homogenized using an ultrasonic processor. After addition of the

stable labelled internal standard (IS) and ammonium hydroxide (0.3%), samples were extracted with 2.5ml of tert-butyl methyl ether. Following **centrifugation**, aliquots of 1.8ml of the organic phase were transferred into a 96-well **plate**. The Packard Multiprobe II **robotic** liquid handler was used to perform all steps mentioned above. The organic phase was dried and the residue was reconstituted with 800mul of 15mM ammonium formate buffer solution (pH 3.25) using a Tomtec Quadra 96 workstation. Aliquots of 10mul of the resulting solution were injected into the LC-MS-MS system. A Symmetry Shield C8 column (50mm*2.1mm, 3.5mum) was used to perform the chromatographic analysis. The mobile phase was 15mM ammonium formate buffer solution (pH 3.25)-acetonitrile (74:26 (v/v)) with a flow-rate of 0.35ml/min. Retention times of the metabolite and SU11248 were about 2.5 and 3.5min, respectively. Total cycle time was 5min. MS detection used the Applied Biosystems-MDS Sciex API 3000 with TurboIonSpray interface and multiple reaction monitoring (MRM) operated in positive ion mode. The method was validated for both compounds over the calibration range of about 2 and 2000ng/g. The suitability and robustness of the method for in vivo samples were confirmed by analysis of monkey tissues from animals dosed with SU11248. 10 Refs.

L6 ANSWER 33 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 2002(39):1036 COMPENDEX
TITLE: The LabCD[trademark]: A **centrifuge**-based microfluidic platform for diagnostics.
AUTHOR: Madou, Marc J. (Department of Mat. Science and Eng. Department of Chemistry Ohio State University, Columbus, OH 43210-1178, United States); Kellogg, Gregory J.
MEETING TITLE: Systems and Technologies for Clinical Diagnostics and Drug Discovery.
MEETING ORGANIZER: SPIE; IBOS
MEETING LOCATION: San Jose, CA, United States
MEETING DATE: 26 Jan 1998-27 Jan 1998
SOURCE: Proceedings of SPIE - The International Society for Optical Engineering v 3259 1998.p 80-93
CODEN: PSISDG ISSN: 0277-786X
PUBLICATION YEAR: 1998
MEETING NUMBER: 59613
DOCUMENT TYPE: Conference Article
TREATMENT CODE: Theoretical
LANGUAGE: English
AN 2002(39):1036 COMPENDEX
AB Diagnostics for point-of-care (POC) and field use requires the integration of fluid processes with means of detection in a user-friendly, portable package. A drawback to the use of many current analyzers for POC and field applications is their reliance on expensive and fragile **robotic** technology for automation, lack of portability, and incomplete integration of sample processing into the device. As a result, a number of microfluidic technologies are being developed for diagnostics applications outside of central laboratories. We compare several of these technologies with our own preferred **centrifugal** flow system, the LabCD[trademark], with an emphasis on fluid propulsion. LabCD[trademark] has been developed to perform a variety of fluidic processes necessary in diagnostics while **dispensing** with traditional pumps and valves. The use of the CD-ROM model provides a natural division of the system into an instrument and a disposable component, each with well-defined functions. The CD format also allows for the use of encoded information to integrate process control, data acquisition, and analysis. Finally, the "solid state" nature of the microfluidics and use of standard manufacturing techniques should yield a low-cost platform. 18 Refs.

L6 ANSWER 34 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 1995(30):3255 COMPENDEX

TITLE: AutoLab: a **robotics** solution for flexible laboratory automation.
AUTHOR: Ahmed, Nizam (James Cook Univ.of North Queensland, Townsville, Aust); Sowmya, Arcot
MEETING TITLE: Intelligent Robots and Computer Vision XIII: 3D Vision, Product Inspection, and Active Vision.
MEETING ORGANIZER: SPIE - Int Soc for Opt Engineering, Bellingham, WA USA
MEETING LOCATION: Boston, MA, USA
MEETING DATE: 02 Nov 1994-04 Nov 1994
SOURCE: Proceedings of SPIE - The International Society for Optical Engineering v 2354 1994.Society of Photo-Optical Instrumentation Engineers, Bellingham, WA, USA.p 205-214
CODEN: PSISDG ISSN: 0277-786X
ISBN: 0-8194-1689-4
PUBLICATION YEAR: 1994
MEETING NUMBER: 22117
DOCUMENT TYPE: Conference Article
TREATMENT CODE: Application; Theoretical
LANGUAGE: English
AN 1995(30):3255 COMPENDEX
AB This paper describes a proposal to develop a flexible automation system for sample preparation and analysis in a chemistry laboratory without human assistance.The key to such automation is a **robot** arm, centrally placed with respect to a series of work stations containing balances, mixers, **dispensers**, **centrifuges** and analytical instruments.Object handling at each station and sample movement from one station to another is performed by the **robot** arm according to user-programmed procedures.The research emphasizes the analysis and modular decomposition of chemistry procedures, modeling the procedures in a computer system and integrating this model with **robot** arm and other instrumentation hardware involved in a complete automation of a chemistry laboratory.9 Refs.

L6 ANSWER 35 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 1992(5):3925 COMPENDEX
DOCUMENT NUMBER: 920562963
TITLE: Quiet wall jet facility for basic aero/hydroacoustics research.
AUTHOR: Marboe, R.C. (Pennsylvania State Univ, State College, PA, USA); Lauchle, G.C.; Kargus, W.A.IV.
MEETING TITLE: Winter Annual Meeting of the American Society of Mechanical Engineers.
MEETING ORGANIZER: ASME, Noise Control and Accoustics Div
MEETING LOCATION: Atlanta, GA, USA
MEETING DATE: 01 Dec 1991-06 Dec 1991
SOURCE: Hydroacoustic Facilities, Instrumentation, and Experimental Techniques American Society of Mechanical Engineers, Noise Control and Acoustics Division (Publication) NCA v 10.Publ by ASME, New York, NY, USA.p 69-73
CODEN: ASMNER
ISBN: 0-7918-0880-7
PUBLICATION YEAR: 1991
MEETING NUMBER: 15922
DOCUMENT TYPE: Conference Article
TREATMENT CODE: Experimental
LANGUAGE: English
AN 1992(5):3925 COMPENDEX DN 920562963
AB The design, performance, and research applications of a novel quiet air flow facility are described.This facility is an open-jet with a semi-circular orifice situated in a planar baffle.A flat **plate** which is typically 30.5 cm wide by 125 cm long inserts into the orifice 1.2 cm above the flat side forming a wall jet over the **plate**.For

prevention of the formation of a jet free shear layer and control of corner vortex contamination, an acoustically transparent, but flow impermeable semi-circular mylar tube is placed over the **plate**.An acoustically and mechanically isolated 20 HP **centrifugal** blower, provides air which passes through a treated labyrinth and flexible hose to the settling chamber of the wall jet facility where turbulence management screens are located. The flat **plate** apparatus is inserted into a very large flow-through anechoic chamber which is described.Acoustic probes (both pressure and intensity) are moved **robotically** with a computer controlled scanner.With a rigid flat **plate**, measurements of the acoustic emissions from basic turbulent boundary layer flow structures are being performed.In another investigation, rearward facing steps and ramps of various heights and angles which promote natural flow separation are substituted.The direct acoustic radiation is measured along with wall pressure statistics and **plate** response.(Author abstract) 11 Refs.

L6 ANSWER 36 OF 38 COMPENDEX COPYRIGHT 2006 EEI on STN
ACCESSION NUMBER: 1987(3):34068 COMPENDEX
DOCUMENT NUMBER: 870325348
; *8758819
TITLE: TWO-POSITION DEVICE ALLOWING A **CENTRIFUGAL** MACHINE SPINNING ABOUT A VERTICAL AXIS TO BE AUTOMATICALLY LOADED WITH TWO WAFER CARRIERS.
AUTHOR: Anon
SOURCE: IBM Tech Discl Bull v 29 n 5 Oct 1986 p 2149-2151
CODEN: IBMTAA ISSN: 0018-8689
PUBLICATION YEAR: 1986
DOCUMENT TYPE: Journal
TREATMENT CODE: Application
LANGUAGE: English
AN 1987(3):34068 COMPENDEX DN 870325348; *8758819
AB This device is provided to allow a **centrifugal** machine spinning about a vertical axis to be automatically loaded and unloaded with two wafer carriers, by means of a handling **robot** currently provided in highly efficient integrated circuit production lines.

L6 ANSWER 37 OF 38 INSPEC (C) 2006 IET on STN
ACCESSION NUMBER: 1996:5201461 INSPEC
DOCUMENT NUMBER: C1996-04-7320-042
TITLE: AutoLab: a **robotics** solution for flexible laboratory automation
AUTHOR: Ahmed, N.; (Dept. of Comput. Sci., James Cook Univ. of North Queensland, Townsville, QLD, Australia), Sowmya, A.
SOURCE: Proceedings of the SPIE - The International Society for Optical Engineering (1994), vol.2345, p. 205-14, 9 refs.
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AB The paper describes a proposal to develop a flexible automation system for sample preparation and analysis in a chemistry laboratory without human assistance. The key to such automation is a **robot** arm,

centrally placed with respect to a series of workstations containing balances, mixers, **dispensers**, **centrifuges** and analytical instruments. Object handling at each station and sample movement from one station to another is performed by the **robot** arm according to user programmed procedures. The research emphasizes the analysis and modular decomposition of chemistry procedures, modelling the procedures in a computer system and integrating this model with a **robot** arm and other instrumentation hardware involved in a complete automation of a chemistry laboratory

L6 ANSWER 38 OF 38 INSPEC (C) 2006 IET on STN
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TITLE: Automatic loading of individual items
AUTHOR: Avtsinov, I.A.; Bityukov, V.K.; Popov, G.V.
SOURCE: Mekhanizatsiya i Avtomatizatsiya Proizvodstva (1988), no.12, p. 1-3, 0 refs.
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AB The design and operation of a pneumatic **centrifugal** loading device, providing a convenient and flexible means of holding individual items before loading them into containers for transfer to an industrial **robot** for processing, is described. The device is in the form of an inverted flat cone, with compressed air being fed into holes in the base to provide an air cushion which supports items to be loaded. Pulleys, caps, convex-concave **plates**, plugs and lenses are some of the items involved